

HIGH FREQUENCY PEAK DETECTOR AND APPLICATIONS THEREOF

ABSTRACT OF THE DISCLOSURE

5           A high frequency peak detector includes an operational amplifier, a transistor, a capacitor, and an average to peak conversion module. A first inverting input of the operational amplifier receives a high frequency input signal, a second inverting input of the operational amplifier receives a common mode voltage of the high frequency signal, and a non-inverting input of the operational amplifier is coupled to the output of the operational amplifier. A gate of the transistor is operably coupled to the output of the operational amplifier and the source of the transistor is operably coupled to a power supply. The capacitor is operably coupled to the drain of the transistor to provide an analog signal representing an average peak to common mode value of the high frequency signal and to a circuit ground. The average to peak conversion module determines a peak value of the high frequency signal based on the analog signal and the common mode value.

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